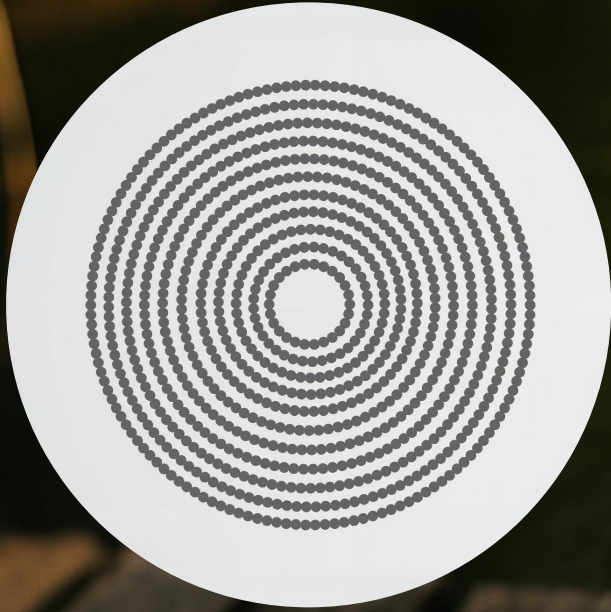




MW Lens

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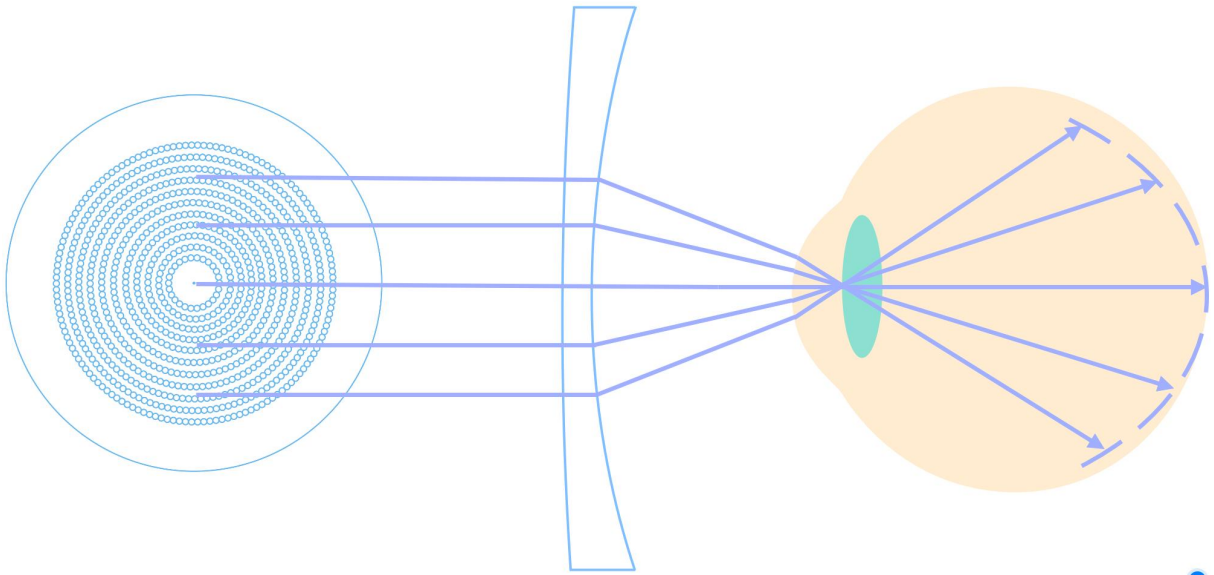
Product Advantages

- Micro eccentric ring technique: Each ring is in a non concentric state to continuously provide differentiated stimulation to the periphery of the retina.
- Small central optical zone: Under the premise of ensuring clear vision in the central macular area, defocusing stimulation is placed as close as possible to the sensitive area of the retina to enhance the effect of myopia intervention.
- Optimization of ring spacing: The ring spacing in sensitive areas of the retina is relatively small, further enhancing the effect of myopia control.

Most Suitable Wearers

- Children and adolescents with progressive myopia
- Children and adolescents with insufficient reserve of farsightedness

Fundamental Hypothesis



By projecting the myopic defocus signal onto the periphery of the retina through a micro lens with positive additional refractive power, the axial growth of the eye is suppressed.

Micro eccentric ring technology

The use of micro eccentric ring technology ensures that the centers of each ring are not at the same point, providing differentiated stimulation for the retina periphery and avoiding the phenomenon of "static defocus saturation" caused by constant defocus within the same field of view, in order to provide sustained and long-term myopia intervention effectiveness.

Patents Provide Technical Protection



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Clinical Trials Provide Scientific Support

Cooperative Medical Care:

Sinopharm Dongfeng General Hospital.

15-month clinical data results:

Compared with low scattering single vision lens, MW lens have a delayed refractive power increment of 0.53D, a delayed axial increment of 0.24mm, an effective control rate of 50% for equivalent spherical power, and an effective control rate of 56% for axial length.

配戴低像差单焦点镜与减少旁中心远视离焦镜及双面复合环带微阵列镜对青少年近视发展的影响临床试验总结

1. 临床试验完成情况: 收集 2022 年 3 月至 2023 年 6 月来就诊的近视患者 140 例 (280 只眼)。低像差单焦点镜片组 (38 例, 76 只眼, A 组), 减少旁中心远视离焦镜片组 (47 例, 94 只眼, B 组), 双面复合环带微阵列镜片佩戴者 (55 例, 110 只眼, C 组)。比较三组儿童在戴镜前与戴镜后的 15 个月, 要求佩戴者戴镜后每三个月进行复查情况下等效球镜度、眼轴长度的变化情况; 通过等效球镜度和眼轴的变化情况, 对不同组间近视控制效果进行比较。
 2. 基线比较: 三组基线的一般资料、屈光度、眼轴、眼内压、裂隙灯、眼底检查和双眼视功能检查等方面均无统计学差异, 认为三组具有可比性。
 3. 效果比较:
 - (1) 等效球镜度: 显示各组戴镜前及戴镜 15 个月后近视等效球镜度均有不同程度的增长, 组间比较等效球镜度: 其中 A 组人均增加 -1.07 ± 0.180 , B 组人均增加 -0.94 ± 0.150 , C 组人均增加 -0.54 ± 0.100 ; A 组比 B 组屈光度人均增加多 0.13D, 延缓近视屈光度进展 12%, 认为 B 组可有效延缓等效球镜度数增长, 但效力较弱; A 组比 C 组屈光度人均增加多 0.53D, 延缓近视屈光度进展 50%, 认为 C 组可有效延缓等效球镜度数增长, 效力较好。
 - (2) 眼轴长度: 各组戴镜前及戴镜 15 个月后眼轴长度均有不同程度的增长, 组间比较: 其中 A 组人均增加 0.43 ± 0.12 mm, B 组人均增加 0.42 ± 0.09 mm, C 组人均增加 0.19 ± 0.07 mm; A 组比 B 组眼轴长度人均增加多 0.01mm, 延缓眼轴长度增长 2%, 认为 B 组可有效延缓眼轴长度增长; A 组比 C 组眼轴长度人均增加多 0.24mm, 延缓眼轴长度增长 56%, 认为 C 组可有效延缓眼轴长度增长, 效力较好。
 - (3) 双眼视功能: 随访 15 个月三组, 三组间无差异。
 4. 安全性分析: 未发生与镜片相关的不良事件。
- 综上所述, 双面复合环带微阵列镜、减少旁中心远视离焦镜可有效控制儿童近视进展, 降低眼轴增长, 其中配戴双面复合环带微阵列镜效果更明显, 两者各有优缺点。本研究也存在局限性, 首先本研究为回顾性研究, 其次我们观察随访儿童配戴镜片的时间不长, 同时研究患者主要来自本院周边地区, 从人员分布来说有一定的局限性, 以及处于疫情严控时期, 孩子的日常用眼习惯、戴镜时间等问题没有严格进行统计和监测, 因此对配戴控制儿童近视类似的研究结果是否相同或有不同, 需要通过更长期、多中心的前瞻性研究的统计来验证它的有效性。本研究中三种镜片均由苏州明世光学科技有限公司设计提供。



Stimulus intensity evaluation---DPME

DPME is used to evaluate the performance of lenslet lens based on defocus amount, filling rate, diameter, surface shape, and optical zone diameter of the lens.

product	DIMS	HAL	CAREA	CAREB	MW
DPME	8.124	11.140	4.553	7.604	12.562

Production Information

refractive index	1.59 (PC)	Lens diameter: • SE less than -8.00D, 70mm • SE is -8.25D~-9.50D, 65mm • SE is -9.75D~11.00D, 60mm
DS	-11.00D~+2.00D	
DC	-4.00D~0.00D	
SE	-11.00D	
coating	green film, super water film, anti blue light film	